

Amendments to the Claims:

Please amend claim 1 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

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1 1. (currently amended) A method of binarizing images containing linear
2 structures, and particularly images of prints from the skin, characterized in that
3 areas of an image are determined that are each distinguished by a preset
4 approximate direction of the structures using a first set of Gabor filters to obtain
5 continuous areas with different directions and in that the continuous areas of the
6 image that have been obtained using the first set of Gabor filters ~~are determined~~
7 are each further filtered exclusively with a single Gabor filter adapted to the given
8 direction so that the continuous areas are filtered by corresponding Gabor filters
9 according to the different directions of the continuous areas, wherein the single
10 Gabor filter is selected from a second set of Gabor filters.

1 2. (previously presented) A method as claimed in claim 1, characterized in
2 that the determination of the areas takes place, tile by tile of the tiles into which
3 the image is divided, with the first set of Gabor filters of corresponding directions.

1 3. (previously presented) A method as claimed in claim 2, characterized in
2 that the first set of Gabor filters includes four Gabor filters.

1 4. (previously presented) A method as claimed in claim 3, characterized in
2 that the directions of the first set of Gabor filters are determined by angles of
3 22.5°, 67.5°, 112.5° and 157.5° to an edge of the image.

1 5. (previously presented) A method as claimed in claim 2, characterized in
2 that, for the determination of the areas from the filter responses tile by tile of the
3 tiles into which the image is divided, a variance is derived in each case from the
4 given filter response and in that tiles having a variance that is greater than a preset
5 threshold value are assigned to the given area.

- 1 6. (original) A method as claimed in claim 5, characterized in that the
2 derivation of the variances is performed for tiles that overlap one another.
- 1 7. (original) A method as claimed in claim 6, characterized in that, at a
2 resolution of approximately 500 dpi, the size of the tiles used for deriving the
3 variance is 16×16 pixels, which tiles are each processed in steps of eight pixels.
- 1 8. (previously presented) A method as claimed in claim 1, characterized in
2 that the pixels are adapted to the environment, as predominant at the time, of the
3 given pixel by smoothing filters.
- 1 9. (previously presented) A method as claimed in claim 1, characterized in
2 that the surface area of the areas so far determined is established and in that areas
3 whose surface area is of less than a preset size are suppressed.
- 1 10. (original) A method as claimed in claim 9, characterized in that the surface
2 area is established by tracing the outlines of the areas by means of an edge-tracing
3 algorithm.
- 1 11. (previously presented) A method as claimed in claim 2, characterized in
2 that tiles for which, when direction was determined, the response of one of the
3 Gabor filters gave a recognizable direction, are filtered with a Gabor filter adapted
4 to this direction, in that tiles for which, when direction was determined, the
5 responses of the Gabor filters gave two adjoining recognizable directions, are
6 filtered with a Gabor filter adapted to the mean direction, and in that tiles for
7 which no direction was determined or for which, when direction was determined,
8 the responses of the Gabor filters gave two non-adjacent directions, are not
9 filtered.
- 1 12. (previously presented) A method as claimed in claim 1, characterized in
2 that the image is binarized prior to the filtering with Gabor filters adapted to
3 direction.

1 13. (original) A method as claimed in claim 12, characterized in that, to allow
2 the image to be binarized, a threshold value is derived from a histogram of the
3 image covering those pixels in which there is clear information on direction, and
4 in that the threshold value is selected in such a way that half of the pixels are
5 lighter than the threshold value and half are darker.

1 14. (previously presented) A method as claimed in claim 12, characterized in
2 that further binarization takes place after the filtering with Gabor filters adapted to
3 direction.

1 15. (previously presented) System for binarizing images containing linear
2 structures, and particularly images of prints from the skin, using a method
3 according to claim 1.

1 16. (previously presented) A method of binarizing images containing linear
2 structures, and particularly images of prints from the skin, characterized in that
3 areas are determined that are each distinguished by a preset approximate direction
4 of the structures and in that the areas of the image that are determined are each
5 filtered with a Gabor filter adapted to the given direction, further characterized in
6 that the determination of the areas takes place, tile by tile of the tiles into which
7 the image is divided, with further Gabor filters of corresponding directions and a
8 variance is derived in each case from the given filter response and in that tiles
9 having a variance that is greater than a preset threshold value are assigned to the
10 given area, and further characterized in that the derivation of the variances is
11 performed for tiles that overlap one another.

1 17. (previously presented) A method of binarizing images containing linear
2 structures, and particularly images of prints from the skin, characterized in that
3 areas are determined that are each distinguished by a preset approximate direction
4 of the structures and in that the areas of the image that are determined are each
5 filtered with a Gabor filter adapted to the given direction, further characterized in
6 that the determination of the areas takes place, tile by tile of the tiles into which
7 the image is divided, with further Gabor filters of corresponding directions, and
8 further characterized in that tiles for which, when direction was determined, the
9 response of one of the Gabor filters gave a recognizable direction, are filtered with
10 a Gabor filter adapted to this direction, in that tiles for which, when direction was
11 determined, the responses of the Gabor filters gave two adjoining recognizable
12 directions, are filtered with a Gabor filter adapted to the mean direction, and in
13 that tiles for which no direction was determined or for which, when direction was
14 determined, the responses of the Gabor filters gave two non-adjacent directions,
15 are not filtered.